In the claims:

5

10

5

1. A fault tolerant computer having a disk multiplexing mechanism which multiplexes a plurality of storage devices and an access path multiplexing mechanism which sets and multiplexes a plurality of access paths for said plurality of storage devices, comprising:

a disk management mechanism which inputs, when a fault such as a failure of said storage device occurs, physical position information of said storage device and operation contents related to the storage device in question to instruct said disk multiplexing mechanism on restoration operation including cut-off and integration operation of said storage device.

The fault tolerant computer as set forth in claim
 wherein

said disk management mechanism includes

a data base which stores said physical position information of said storage device and information about an access path to said storage device so as to correspond with each other for each said storage device.

The fault tolerant computer as set forth in claim
 wherein

said disk management mechanism sends

said access path information corresponding to said physical position information obtained from said data base together with said operation contents to said disk multiplexing mechanism to instruct on restoration operation including cut-off and integration operation of said storage device.

10

5

10

15

5

4. The fault tolerant computer as set forth in claim 2, further comprising:

first access element which sends said access path information corresponding to said physical position information obtained from said data base to said access path multiplexing mechanism to receive, from said access path multiplexing mechanism which manages said access path information, a virtual access path served for said disk multiplexing mechanism to recognize said storage device, which is a virtual access path obtained by bundling said plurality of access paths into one, and

second access element which sends path information composed of said virtual access path received by said first access element and said operation contents to said disk multiplexing mechanism.

The fault tolerant computer as set forth in claim 5. 2, wherein

> said disk management mechanism includes interface element which receives input of

physical position information of said storage device and operation contents related to the storage device in question, as well as receives operation results of said operation contents from said disk multiplexing mechanism.

6. The fault tolerant computer as set forth in claim2, further comprising:

first access element which sends said access path information corresponding to said physical position information obtained from said data base to said access path multiplexing mechanism to receive, from said access path multiplexing mechanism which manages said access path information, a virtual access path served for said disk multiplexing mechanism to recognize said storage device, which is a virtual access path obtained by bundling said plurality of access paths into one, and

second access element which sends path information composed of said virtual access path received by said first access element and said operation contents to said disk multiplexing mechanism, wherein

said disk management mechanism includes

interface element which receives input of physical position information of said storage device and operation contents related to the storage device in question, as well as receives operation results of said operation contents from said disk multiplexing mechanism.

15

20

5

5

10

7. A disk management mechanism of a fault tolerant computer having a disk multiplexing mechanism which multiplexes a plurality of storage devices and an access path multiplexing mechanism which sets and multiplexes a plurality of access paths for said plurality of storage devices, wherein

5

10

5

5

when a fault such as a failure of said storage device occurs, physical position information of said storage device and operation contents related to the storage device in question are input to instruct said disk multiplexing mechanism on restoration operation including cut-off and integration operation of said storage device.

8. The disk management mechanism of a fault tolerant computer as set forth in claim 7, including

a data base which stores said physical position information of said storage device and information about an access path to said storage device so as to correspond with each other for each said storage device.

9. The disk management mechanism of a fault tolerant computer as set forth in claim 8, wherein

said access path information corresponding to said physical position information obtained from said data base is sent together with said operation contents to said disk multiplexing mechanism to instruct on

5

10

15

5

restoration operation including cut-off and integration operation of said storage device.

10. The disk management mechanism of a fault tolerant computer as set forth in claim 8, further comprising:

first access element which sends said access path information corresponding to said physical position information obtained from said data base to said access path multiplexing mechanism to receive, from said access path multiplexing mechanism which manages said access path information, a virtual access path served for said disk multiplexing mechanism to recognize said storage device, which is a virtual access path obtained by bundling said plurality of access paths into one, and

second access element which sends path information composed of said virtual access path received by said first access element and said operation contents to said disk multiplexing mechanism.

11. The disk management mechanism of a fault tolerant computer as set forth in claim 8, further comprising

interface element which receives input of physical position information of said storage device and operation contents related to the storage device in question, as well as receives operation results of said operation contents from said disk multiplexing mechanism.

12. The disk management mechanism of a fault tolerant computer as set forth in claim 8, further comprising:

first access element which sends said access path information corresponding to said physical position information obtained from said data base to said access path multiplexing mechanism to receive, from said access path multiplexing mechanism which manages said access path information, a virtual access path served for said disk multiplexing mechanism to recognize said storage device, which is a virtual access path obtained by bundling said plurality of access paths into one,

5

10

15

20

5

second access element which sends path
information composed of said virtual access path
received by said first access element and said operation
contents to said disk multiplexing mechanism, and

interface element which receives input of physical position information of said storage device and operation contents related to the storage device in question, as well as receives operation results of said operation contents from said disk multiplexing mechanism.

13. A disk management program of a fault tolerant computer having a disk multiplexing mechanism which multiplexes a plurality of storage devices and an access path multiplexing mechanism which sets and multiplexes a plurality of access paths for said plurality of storage devices, which executes,

when a fault such as a failure of said storage device occurs, a function of instructing said disk multiplexing mechanism on restoration operation including cut-off and integration operation of said storage device by inputting physical position information of said storage device and operation contents related to the storage device in question.

10

5

10

15

14. The disk management program of a fault tolerant computer as set forth in claim 13, which executes the functions of:

sending, to said access path multiplexing mechanism, access path information corresponding to said physical position information obtained from a data base which stores said physical position information of said storage device and said access path information to said storage device so as to correspond with each other for each said storage device and receiving, from said access path multiplexing mechanism which manages said access path information, a virtual access path served for said disk multiplexing mechanism to recognize said storage device, which is a virtual access path obtained by bundling said plurality of access paths into one, and

sending path information composed of said virtual access path received and said operation contents to said disk multiplexing mechanism.

15. The disk management program of a fault tolerant computer as set forth in claim 14, which executes

an interface function of receiving input of physical position information of said storage device and operation contents related to the storage device in question, as well as receiving operation results of said operation contents from said disk multiplexing mechanism.

5